## Claims 1 – 15 (cancelled)

1

3

4

5

6

- 1 Claim 16. (new) A classification and management system for patients with lower extremity arterial occlusive disease comprising the steps of:
  - examining a patient at a healthcare facility with lower extremity arterial occlusion disease,
  - collecting patient data including patient diagnoses, pertinent physical findings and noninvasive arterial pressure and blood flow data,
- recording the collected patient data,
- transmitting said collected patient data to an evaluating authority,
- comparing said collected patient data against a medically accepted set
  of disease specific criteria at the evaluating authority to provide an initial
  diagnosis and preliminary classification of those patients "potentially at
  risk" and those patients "not at risk" of developing complications of
  arterial occlusive disease,
- transmitting said preliminary classification to the healthcare facility,
- referring those patients classified as "potentially at risk" of arterial
  occlusive disease to an accredited laboratory for noninvasive vascular
  evaluation,
- evaluating those "potentially at risk" patients at the accredited
  laboratory against medically accepted criteria,
- recording the results of said noninvasive vascular evaluation at the accredited laboratory,
- transmitting said recorded results to the evaluating authority for final classification,
- classifying each patient at the evaluating authority against medically accepted criteria as "at risk" or "not at risk",
- transmitting said "at risk" or "not at risk" patient final classification to the healthcare facility,
- recording said "at risk" or "not at risk" patient final classification at the healthcare facility,
- referring patients having a final classification of "at risk" for critical
  ischemia with associated extremity lesions and patients with
  noninvasive evidence of severe ischemia to a vascular surgery facility

33 for vascular surgical assessment to determine whether 34 revascularization is necessary,

42

43

44

45

46

47

48

49

50

51

53

54

55

56

57 58

59

60

61

62

63

64

65 66

- 35 assessing such "at risk" patients against medically accepted criteria as "clinical indication for operation" or "no indication for operation" at the 36 vascular surgery facility, 37
- 38 transmitting patient assessments assessed as "clinical indication for 39 operation" or "no indication for operation" assessment to the evaluating 40 authority,
- 41 informing those patients assessed as "clinical indication for operation",
  - electing either revascularization and periodic management system evaluation at the healthcare facility or routine wound care and periodic revaluation at the healthcare facility by patients assessed as "clinical indication for operation",
  - monitoring patients assessed as "no indication for operation" by the healthcare facility with increased precautions to monitor for detection of any deterioration that would require reassessment,
  - referring patients having ulcers, pain or gangrene at the time of "no indication for operation" assessment for reassessment,
- recording the reasons for not referring such patients as "clinical 52 indication for operation",
  - referring patients classified as "no indication for operation" that develop ulcers, pair and/or gangrene to the vascular surgery facility for reassessment,
    - reassessing the referred patient at the vascular surgery facility against medically accepted criteria as "no indication for operation" or "clinical indication for operation",
    - transmitting the reassessment of "no indication for operation" or "clinical indication for operation" to the evaluating authority for reevaluation as "no indication for operation" or "clinical indication for operation",
    - transmitting the reevaluation to the healthcare faculty with the appropriate medical procedure and regimen,
  - treating and monitoring patients classified as "not at risk", "at risk" and assessed as "no indication for operation" or "clinical indication for operation" at the healthcare facility,

- providing "not at risk" patients without limb ulcers routine care and precautions at the healthcare facility,
- o providing "not at risk" patients with limb ulcers routine wound care at the healthcare facility,
- providing "not at risk" patients with limb ulcers periodic reevaluation by
  the evaluating authority,
- providing "at risk" patients assessed as "no indication for operation" or
  "operation not elected by patient", and "clinical indication for operation"
  patient undergoing revascularization at the vascular surgery facility with
  intensive wound care at the healthcare facility, and,
- providing periodic reevaluations of "at risk" patients assessed as "no indication for operation" or "operation not elected by patient" with increased precautions at the healthcare facility.